PBW

Consulting Engineers and Scientists

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April 14, 2008
(PBW Project No. 1352)

Mr. Gary Miller, Remedial Project Manager
U.S. Environmental Protection Agency, Region 6
Superfund Division (6SF-AP)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Phase 3 Wetland Surface Sediment Investigation Data and Proposed Phase 4 Wetland Sediment Investigation Activities, Gulfco Marine Maintenance Site, Freeport, Texas

Dear Mr. Miller:

This letter has been prepared to provide a summary of Phase 3 wetland surface sediment data collected as part of the Remedial Investigation/Feasibility Study (RI/FS) at the subject site (the Site), and to propose Phase 4 wetland sediment investigation activities to be performed on the basis of those data. This information is provided by Pastor, Behling & Wheeler, LLC (PBW) on behalf of LDL Coastal Limited LP (LDL), Chromalloy American Corporation (Chromalloy) and The Dow Chemical Company (Dow), collectively the Gulfco Restoration Group (the Group). In accordance with Paragraph 52 of the amended Unilateral Administrative Order for the Site, I certify that I have been fully authorized by these Respondents to submit these documents and to legally bind these Respondents thereto.

This letter includes the modifications requested by the United States Environmental Protection Agency (EPA) in a letter dated March 18, 2008, which approved (with modifications) the original version of this letter submitted on February 12, 2008.

EXISTING DATA SUMMARY

Phase 3 wetland sediment investigation activities were proposed in a November 1, 2007 letter to you and were approved by your letter dated December 13, 2007. Phase 3 field activities, which were performed during December 2007, included collection of wetland sediment samples from the 0 to 0.5 foot depth interval at nine locations (3WSED1 through 3WSED9), and from the 1 to 2 foot depth interval at one location (2WSED9). Proposed samples from the 1 to 2 foot depth interval at two other locations (2WSED8 and 2WSED10) were not collected because saturated conditions (standing water) were observed at these locations. All of these wetland sediment sample locations are shown on Figure 1.

In accordance with the Work Plan provisions, the analytical data from the nine surface samples were used to evaluate the lateral extent of contamination in wetland sediments, and assess the need for additional wetland sediment sampling activities. This evaluation entailed a comparison to Preliminary Screening Values (PSVs) for sediment as listed in Table 21 of the Work Plan, subject to a comparison to background concentrations. Based on the similar composition and condition of the surface soils collected from within the approved background soil area

approximately 2,000 feet east of the Site near the east end of Marlin Avenue as part of the Site-specific background investigation to the wetland sediments in the North Area, the Site-specific background values determined from those samples (described in my September 11, 2007 letter to you) were used to represent background wetland sediment concentrations for the purposes of evaluating the lateral extent of contamination.

The comparison values for each analyte are listed in Table 1. Theses values are the higher of each analyte's PSV or background value (where applicable), including values from the January 2006 update to the Texas Commission on Environmental Quality (TCEQ) Guidance for Conducting Ecological Risk Assessments at Remediation Sites in Texas (RG-263). As indicated in Table 2, the only Phase 3 surface sediment sample comparison value exceedence was a zinc concentration of 319 mg/kg (relative to a comparison value of 150 mg/kg) in the 3WSED9 sample. This exceedence, along with the Phase 1 and 2 sample exceedences, is plotted on Figure 1.

PROPOSED PHASE 4 WETLAND SEDIMENT INVESTIGATION ACTIVITIES

The Work Plan specifies that where exceedences are indicated at perimeter locations, then additional sediment samples should be collected to define the lateral extent of contamination. To address this requirement, one additional wetland sediment sample (4WSED1) is proposed to the east of 3WSED9 as shown on Figure 1. This sample will be collected from the 0 to 0.5 foot depth interval in accordance with the methods and procedures specified in the Work Plan and the Field Sampling Plan, and will be analyzed for zinc as indicated in Table 3.

During our telephone conversation on January 28, 2008, you requested the collection of two additional wetland sediment samples at the site. Your request was considered by the Group. In the spirit of cooperation, the Group has agreed to your request, even though the samples are not required for nature and extent purposes and the two new locations are above and beyond the requirements in the EPA-approved Work Plan. The samples will be collected from 0 to 0.5 foot depth interval at locations 4WSED2 and 4WSED3 as shown on Figure 1 and will be analyzed as specified in Table 3.

In addition, as requested in your March 18, 2008 letter, a second attempt will be made to collect samples from the 1 to 2 foot depth interval at locations 2WSED8 and 2WSED10. If standing water is again present at the sample locations, or saturated conditions are observed at the proposed sample depth intervals, then these samples will not be collected.

Thank you for the opportunity to submit this information. Based on your approval of the previous version of this letter submitted on February 12, 2008, we are planning to perform the proposed activities during the week of May 12, 2008. Please let us know if you have any questions or comments regarding that schedule.

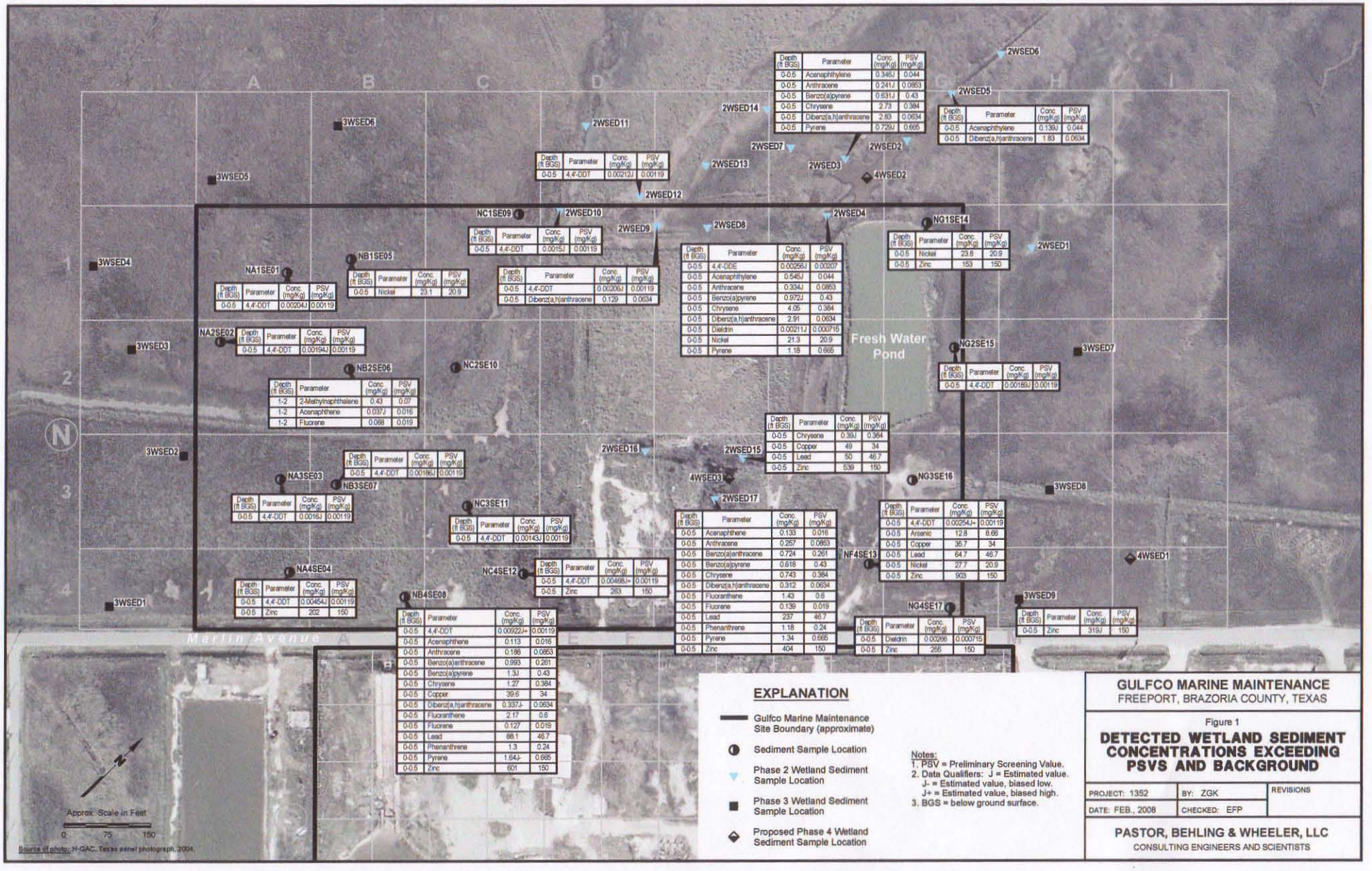
Sincerely,

PASTOR, BEHLING & WHEELER, LLC

Eric F. Pastor, P.E.
Principal Engineer

cc: Ms. Luda Voskov - Texas Commission on Environmental Quality
Mr. Brent Murray – Environmental Quality, Inc.
Mr. Rob Rouse - The Dow Chemical Company
Mr. Donnie Belote – The Dow Chemical Company
Mr. Allen Daniels - LDL Coastal Limited, LP
Mr. F. William Mahley - Strasburger & Price, LLP
Mr. James C. Morriss III - Thompson & Knight, LLP
Ms. Elizabeth Webb - Thompson & Knight, LLP

FIGURE



Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	Acenaphthylene	0.346J	0.044
0-0.5	Anthracene	0.241J	0.0853
0-0.5	Benzo(a)pyrene	0.631J	0.43
0-0.5	Chrysene	2.73	0.384
0-0.5	Dibenz(a,h)anthracene	2.83	0.0634
0-0.5	Pyrene	0.729J	0.665

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	Acenaphthylene	0.139J	0.044
0-0.5	Dibenz(a,h)anthracene	1.83	0.0634

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00212J	0.00119

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.0015J	0.00119

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	Nickel	23.1	20.9

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00206J	0.00119
0-0.5	Dibenz(a,h)anthracene	0.129	0.0634

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDE	0.00256J	0.00207
0-0.5	Acenaphthylene	0.545J	0.044
0-0.5	Anthracene	0.334J	0.0853
0-0.5	Benzo(a)pyrene	0.972J	0.43
0-0.5	Chrysene	4.05	0.384
0-0.5	Dibenz(a,h)anthracene	2.91	0.0634
0-0.5	Dieldrin	0.00211J	0.000715
0-0.5	Nickel	21.3	20.9
0-0.5	Pyrene	1.18	0.665

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	Nickel	23.8	20.9
0-0.5	Zinc	153	150

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00204J	0.00119

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00194J	0.00119

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00186J	0.00119

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.0016J	0.00119

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00143J	0.00119

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00468J+	0.00119
0-0.5	Zinc	263	150

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00922J+	0.00119
0-0.5	Acenaphthene	0.113	0.016
0-0.5	Anthracene	0.188	0.0853
0-0.5	Benzo(a)anthracene	0.993	0.261
0-0.5	Benzo(a)pyrene	1.3J	0.43
0-0.5	Chrysene	1.27	0.384
0-0.5	Copper	39.6	34
0-0.5	Dibenz(a,h)anthracene	0.337J-	0.0634
0-0.5	Fluoranthene	2.17	0.6
0-0.5	Fluorene	0.127	0.019
0-0.5	Lead	88.1	46.7
0-0.5	Phenanthrene	1.3	0.24
0-0.5	Pyrene	1.64J-	0.665
0-0.5	Zinc	601	150

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	Chrysene	0.39J	0.384
0-0.5	Copper	49	34
0-0.5	Lead	50	46.7
0-0.5	Zinc	539	150

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	Acenaphthene	0.133	0.016
0-0.5	Anthracene	0.257	0.0853
0-0.5	Benzo(a)anthracene	0.724	0.261
0-0.5	Benzo(a)pyrene	0.618	0.43
0-0.5	Chrysene	0.743	0.384
0-0.5	Dibenz(a,h)anthracene	0.312	0.0634
0-0.5	Fluoranthene	1.43	0.6
0-0.5	Fluorene	0.139	0.019
0-0.5	Lead	237	46.7
0-0.5	Phenanthrene	1.18	0.24
0-0.5	Pyrene	1.34	0.665
0-0.5	Zinc	404	150

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	4,4'-DDT	0.00254J+	0.00119
0-0.5	Arsenic	12.8	8.66
0-0.5	Copper	35.7	34
0-0.5	Lead	64.7	46.7
0-0.5	Nickel	27.7	20.9
0-0.5	Zinc	903	150

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	Dieldrin	0.00266	0.000715
0-0.5	Zinc	255	150

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
0-0.5	Zinc	319J	150

Depth (ft BGS)	Parameter	Conc. (mg/Kg)	PSV (mg/Kg)
1-2	2-Methylnaphthalene	0.43	0.07
1-2	Acenaphthene	0.037J	0.016
1-2	Fluorene	0.088	0.019

EXPLANATION

- Gulfco Marine Maintenance Site Boundary (approximate)
- Sediment Sample Location
- Phase 2 Wetland Sediment Sample Location
- Phase 3 Wetland Sediment Sample Location
- Proposed Phase 4 Wetland Sediment Sample Location

Notes:
1. PSV = Preliminary Screening Value.
2. Data Qualifiers: J = Estimated value. J- = Estimated value, biased low. J+ = Estimated value, biased high.
3. BGS = below ground surface.

GULFCO MARINE MAINTENANCE
FREEPORT, BRAZORIA COUNTY, TEXAS

Figure 1

DETECTED WETLAND SEDIMENT CONCENTRATIONS EXCEEDING PSVS AND BACKGROUND

PROJECT: 1352	BY: ZGK	REVISIONS
DATE: FEB., 2008	CHECKED: EFP	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

TABLES

TABLE 1 - EXTENT EVALUATION COMPARISON VALUES[1]

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 21 of RI/FS Workplan[2]			PSV (mg/kg)	Potential Site-Specific Background Values[6]	Extent Evaluation Comparison Value
	$^{Tot}Sed_{Comb}$[3]	TCEQ Ecological Benchmark for Sediment[4]	EPA EcoTox Threshold[5]			
METALS						
Aluminum	1.53E+05	---	---	1.53E+05	---	1.53E+05
Antimony	8.32E+01	---	---	8.32E+01	---	8.32E+01
Arsenic	1.15E+02	8.20E+00	8.20E+00	8.20E+00	8.66E+00	8.66E+00
Barium	2.30E+04	---	---	2.30E+04	4.62E+02	2.30E+04
Beryllium	2.66E+01	---	---	2.66E+01	---	2.66E+01
Boron	1.07E+05	---	---	1.07E+05	---	1.07E+05
Cadmium	1.09E+03	1.20E+00	1.20E+00	1.20E+00	---	1.20E+00
Chromium	3.65E+04	8.10E+01	8.10E+01	8.10E+01	2.40E+01	8.10E+01
Chromium (VI)	1.36E+02	---	---	1.36E+02	---	1.36E+02
Cobalt	3.20E+04	---	---	3.20E+04	---	3.20E+04
Copper	2.13E+04	3.40E+01	3.40E+01	3.40E+01	2.36E+01	3.40E+01
Iron	---	---	---	0.00E+00	---	0.00E+00
Lead	5.00E+02	4.67E+01	4.67E+01	4.67E+01	1.79E+01	4.67E+01
Lithium	1.07E+04	---	---	1.07E+04	3.62E+01	1.07E+04
Manganese	1.40E+04	---	---	1.40E+04	6.50E+02	1.40E+04
Mercury	3.43E+01	1.50E-01	1.50E-01	1.50E-01	3.50E-02	1.50E-01
Molybdenum	1.84E+03	---	---	1.84E+03	7.40E-01	1.84E+03
Nickel	1.40E+03	2.09E+01	2.09E+01	2.09E+01	---	2.09E+01
Selenium	2.66E+03	---	---	2.66E+03	---	2.66E+03
Silver	3.50E+02	1.00E+00	1.00E+00	1.00E+00	---	1.00E+00
Strontium	1.52E+05	---	---	1.52E+05	---	1.52E+05
Thallium	---	---	---	0.00E+00	---	0.00E+00
Tin	9.19E+04	---	---	9.19E+04	---	9.19E+04
Titanium	1.00E+06	---	---	1.00E+06	---	1.00E+06
Vanadium	3.29E+02	---	---	3.29E+02	---	3.29E+02
Zinc	7.60E+04	1.50E+02	1.50E+02	1.50E+02	1.27E+02	1.50E+02
PESTICIDES						
4,4'-DDD	1.23E+02	1.22E-03	1.22E-03	1.22E-03	---	1.22E-03
4,4'-DDE	8.66E+01	2.07E-03	2.07E-03	2.07E-03	---	2.07E-03
4,4'-DDT	8.66E+01	1.19E-03	1.19E-03	1.19E-03	---	1.19E-03

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	$^{Tot}Sed_{Comb}$ [3]	TCEQ Ecological Benchmark for Sediment [4]	EPA EcoTox Threshold [5]			
Aldrin	8.36E-01	---	---	8.36E-01	---	8.36E-01
alpha-BHC	4.05E+00	---	---	4.05E+00	---	4.05E+00
alpha-Chlordane	4.06E+01	0.00226[7]	---	4.06E+01	---	4.06E+01
beta-BHC	1.42E+01	---	---	1.42E+01	---	1.42E+01
delta-BHC	1.42E+01	---	---	1.42E+01	---	1.42E+01
Dieldrin	8.88E-01	7.15E-04	7.15E-04	7.15E-04	---	7.15E-04
Endosulfan I	3.06E+02	---	2.90E-03	2.90E-03	---	2.90E-03
Endosulfan II	9.19E+02	---	1.40E-02	1.40E-02	---	1.40E-02
Endosulfan sulfate	9.19E+02	---	---	9.19E+02	---	9.19E+02
Endrin	4.59E+01	---	3.50E-03	3.50E-03	---	3.50E-03
Endrin aldehyde	4.59E+01	---	---	4.59E+01	---	4.59E+01
Endrin ketone	4.59E+01	---	---	4.59E+01	---	4.59E+01
gamma-BHC (Lindane)	1.96E+01	3.20E-04	3.20E-04	3.20E-04	---	3.20E-04
gamma-Chlordane	4.10E+01	0.00226[7]	---	4.10E+01	---	4.10E+01
Heptachlor	3.16E+00	---	---	3.16E+00	---	3.16E+00
Heptachlor epoxide	1.56E+00	---	---	1.56E+00	---	1.56E+00
Methoxychlor	7.65E+02	---	1.90E-02	1.90E-02	---	1.90E-02
Toxaphene	1.29E+01	---	2.80E-02	2.80E-02	---	2.80E-02
PCBs	2.30E+00	2.27E-02		2.27E-02	---	2.27E-02
Aroclor-1016	---	---	---	0.00E+00	---	0.00E+00
Aroclor-1221	---	---	---	0.00E+00	---	0.00E+00
Aroclor-1232	---	---	---	0.00E+00	---	0.00E+00
Aroclor-1242	---	---	---	0.00E+00	---	0.00E+00
Aroclor-1248	---	---	---	0.00E+00	---	0.00E+00
Aroclor-1254	---	---	---	0.00E+00	---	0.00E+00
Aroclor-1260	---	---	---	0.00E+00	---	0.00E+00
VOCs						
1,1,1,2-Tetrachloroethane	2.10E+03	---	---	2.10E+03	---	2.10E+03
1,1,1-Trichloroethane	1.47E+05	2.63E+00	1.70E-01	1.70E-01	---	1.70E-01
1,1,2,2-Tetrachloroethane	2.72E+02	6.10E-01	9.40E-01	6.10E-01	---	6.10E-01
1,1,2-Trichloroethane	9.56E+02	3.00E-01	---	3.00E-01	---	3.00E-01

TABLE 1 - EXTENT EVALUATION COMPARISON VALUES[1]

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 21 of RI/FS Workplan[2]			PSV (mg/kg)	Potential Site-Specific Background Values[6]	Extent Evaluation Comparison Value
	$^{Tot}Sed_{Comb}$[3]	TCEQ Ecological Benchmark for Sediment[4]	EPA EcoTox Threshold[5]			
1,1-Dichloroethane	7.35E+04	---	---	7.35E+04	---	7.35E+04
1,1-Dichloroethene	3.67E+04	1.54E+01	---	1.54E+01	---	1.54E+01
1,1-Dichloropropene	5.45E+02	---	---	5.45E+02	---	5.45E+02
1,2,3-Trichloropropane	7.79E+00	---	---	7.79E+00	---	7.79E+00
1,2,4-Trichlorobenzene	1.53E+03	3.90E-01	9.20E+00	3.90E-01	---	3.90E-01
1,2,4-Trimethylbenzene	3.67E+04	2.16E+00	---	2.16E+00	---	2.16E+00
1,2-Dibromo-3-chloropropane	1.01E+01	---	---	1.01E+01	---	1.01E+01
1,2-Dibromoethane	2.72E+01	---	---	2.72E+01	---	2.72E+01
1,2-Dichlorobenzene	6.61E+04	7.40E-01	3.40E-01	3.40E-01	---	3.40E-01
1,2-Dichloroethane	2.70E+01	4.30E+00	---	4.30E+00	---	4.30E+00
1,2-Dichloropropane	8.01E+02	2.82E+00	---	2.82E+00	---	2.82E+00
1,3,5-Trimethylbenzene	3.67E+04	---	---	3.67E+04	---	3.67E+04
1,3-Dichlorobenzene	2.20E+04	3.20E-01	1.70E+00	3.20E-01	---	3.20E-01
1,3-Dichloropropane	5.45E+02	4.00E-02	---	4.00E-02	---	4.00E-02
1,4-Dichlorobenzene	2.27E+03	7.00E-01	3.50E-01	3.50E-01	---	3.50E-01
2,2-Dichloropropane	8.01E+02	---	---	8.01E+02	---	8.01E+02
2-Butanone	4.41E+05	---	---	4.41E+05	---	4.41E+05
2-Chloroethylvinyl ether	4.95E+01	---	---	4.95E+01	---	4.95E+01
2-Chlorotoluene	3.06E+03	---	---	3.06E+03	---	3.06E+03
2-Hexanone	4.41E+04	---	---	4.41E+04	---	4.41E+04
4-Chlorotoluene	1.47E+04	---	---	1.47E+04	---	1.47E+04
4-Isopropyltoluene	7.35E+04	---	---	7.35E+04	---	7.35E+04
4-Methyl-2-pentanone	5.88E+04	4.53E+01	---	4.53E+01	---	4.53E+01
Acetone	6.61E+05	1.67E+02	---	1.67E+02	---	1.67E+02
Acrolein	3.67E+02	---	---	3.67E+02	---	3.67E+02
Acrylonitrile	1.01E+02	1.70E-01	---	1.70E-01	---	1.70E-01
Benzene	9.91E+02	1.40E-01	5.70E-02	5.70E-02	---	5.70E-02
Bromobenzene	1.47E+04	---	---	1.47E+04	---	1.47E+04
Bromodichloromethane	8.79E+02	---	---	8.79E+02	---	8.79E+02
Bromoform	6.90E+03	1.78E+00	6.50E-01	6.50E-01	---	6.50E-01
Bromomethane	1.03E+03	---	---	1.03E+03	---	1.03E+03

TABLE 1 - EXTENT EVALUATION COMPARISON VALUES[1]

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 21 of RI/FS Workplan[2]			PSV (mg/kg)	Potential Site-Specific Background Values[6]	Extent Evaluation Comparison Value
	$^{Tot}Sed_{Comb}$[3]	TCEQ Ecological Benchmark for Sediment [4]	EPA EcoTox Threshold [5]			
Butanol	7.35E+04	---	---	7.35E+04	---	7.35E+04
Carbon disulfide	7.35E+04	---	---	7.35E+04	---	7.35E+04
Carbon tetrachloride	4.19E+02	3.67E+00	1.20E+00	1.20E+00	---	1.20E+00
Chlorobenzene	1.47E+04	2.90E-01	8.20E-01	2.90E-01	---	2.90E-01
Chloroethane	2.94E+05	---	---	2.94E+05	---	2.94E+05
Chloroform	7.35E+03	4.30E+00	---	4.30E+00	---	4.30E+00
Chloromethane	4.19E+03	8.74E+00	---	8.74E+00	---	8.74E+00
cis-1,2-Dichloroethene	7.35E+03	---	---	7.35E+03	---	7.35E+03
cis-1,3-Dichloropropene	7.35E+01	---	---	7.35E+01	---	7.35E+01
Dibromochloromethane	6.49E+02	---	---	6.49E+02	---	6.49E+02
Dibromomethane	7.27E+03	---	---	7.27E+03	---	7.27E+03
Dichlorodifluoromethane	1.47E+05	---	---	1.47E+05	---	1.47E+05
Ethylbenzene	7.35E+04	6.50E-01	3.60E+00	6.50E-01	---	6.50E-01
Hexachlorobutadiene	3.06E+01	2.00E-02	---	2.00E-02	---	2.00E-02
Isopropylbenzene (Cumene)	7.35E+04	---	---	7.35E+04	---	7.35E+04
Methyl acetate	7.35E+05	---	---	7.35E+05	---	7.35E+05
Methyl iodide	1.03E+03	---	---	1.03E+03	---	1.03E+03
Methylcyclohexane	1.00E+06	---	---	1.00E+06	---	1.00E+06
Methylene chloride	7.27E+03	3.82E+00	---	3.82E+00	---	3.82E+00
Naphthalene	2.47E+03	1.60E-01	1.60E-01	1.60E-01	---	1.60E-01
n-Butylbenzene	6.12E+03	---	---	6.12E+03	---	6.12E+03
n-Propylbenzene	2.94E+04	---	---	2.94E+04	---	2.94E+04
o-Xylene	1.00E+06	---	---	1.00E+06	---	1.00E+06
sec-Butylbenzene	2.94E+04	---	---	2.94E+04	---	2.94E+04
Styrene	1.47E+05	3.72E+00	---	3.72E+00	---	3.72E+00
tert-Butyl methyl ether (MTBE)	7.35E+03	---	---	7.35E+03	---	7.35E+03
tert-Butylbenzene	2.94E+04	---	---	2.94E+04	---	2.94E+04
Tetrachloroethene	1.05E+03	3.10E+00	5.30E-01	5.30E-01	---	5.30E-01
Toluene	5.90E+04	9.40E-01	6.70E-01	6.70E-01	---	6.70E-01
trans-1,2-Dichloroethene	1.47E+04	---	---	1.47E+04	---	1.47E+04
trans-1,3-Dichloropropene	5.45E+02	---	---	5.45E+02	---	5.45E+02

TABLE 1 - EXTENT EVALUATION COMPARISON VALUES[1]

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 21 of RI/FS Workplan[2]			PSV (mg/kg)	Potential Site-Specific Background Values[6]	Extent Evaluation Comparison Value
	$^{Tot}Sed_{Comb}$[3]	TCEQ Ecological Benchmark for Sediment[4]	EPA EcoTox Threshold[5]			
Trichloroethene	4.41E+03	1.47E+00	1.60E+00	1.47E+00	---	1.47E+00
Trichlorofluoromethane	2.20E+05	---	---	2.20E+05	---	2.20E+05
Trichlorotrifluoroethane	1.00E+06	---	---	1.00E+06	---	1.00E+06
Vinyl acetate	7.35E+05	---	---	7.35E+05	---	7.35E+05
Vinyl chloride	3.63E+01	---	---	3.63E+01	---	3.63E+01
Xylene (total)	1.47E+05	2.54E+00	---	2.54E+00	---	2.54E+00
SVOCs						
1,2Diphenylhydrazine/Azobenzen	1.78E+01	---	---	1.78E+01	---	1.78E+01
2,4,5-Trichlorophenol	1.53E+04	---	---	1.53E+04	---	1.53E+04
2,4,6-Trichlorophenol	1.29E+03	---	---	1.29E+03	---	1.29E+03
2,4-Dichlorophenol	4.59E+02	---	---	4.59E+02	---	4.59E+02
2,4-Dimethylphenol	3.06E+03	---	---	3.06E+03	---	3.06E+03
2,4-Dinitrophenol	3.06E+02	---	---	3.06E+02	---	3.06E+02
2,4-Dinitrotoluene	2.09E+01	---	---	2.09E+01	---	2.09E+01
2,6-Dinitrotoluene	2.09E+01	---	---	2.09E+01	---	2.09E+01
2-Chloronaphthalene	9.90E+03	---	---	9.90E+03	---	9.90E+03
2-Chlorophenol	3.67E+03	---	---	3.67E+03	---	3.67E+03
2-Methylnaphthalene	4.95E+02	7.00E-02	7.00E-02	7.00E-02	---	7.00E-02
2-Nitroaniline	4.59E+01	---	---	4.59E+01	---	4.59E+01
2-Nitrophenol	3.06E+02	---	---	3.06E+02	---	3.06E+02
3,3'-Dichlorobenzidine	3.16E+01	---	---	3.16E+01	---	3.16E+01
3-Nitroaniline	4.59E+01	---	---	4.59E+01	---	4.59E+01
4,6-Dinitro-2-methylphenol	3.06E+02	---	---	3.06E+02	---	3.06E+02
4-Bromophenyl phenyl ether	9.47E-01	---	1.30E+00	9.47E-01	---	9.47E-01
4-Chloro-3-methylphenol	7.65E+02	---	---	7.65E+02	---	7.65E+02
4-Chloroaniline	6.12E+02	---	---	6.12E+02	---	6.12E+02
4-Chlorophenyl phenyl ether	9.47E-01	---	---	9.47E-01	---	9.47E-01
4-Nitroaniline	3.74E+02	---	---	3.74E+02	---	3.74E+02
4-Nitrophenol	3.06E+02	---	---	3.06E+02	---	3.06E+02
Acenaphthene	7.42E+03	1.60E-02	1.60E-02	1.60E-02	---	1.60E-02
Acenaphthylene	7.42E+03	4.40E-02	4.40E-02	4.40E-02	---	4.40E-02

TABLE 1 - EXTENT EVALUATION COMPARISON VALUES[1]

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 21 of RI/FS Workplan[2]			PSV (mg/kg)	Potential Site-Specific Background Values[6]	Extent Evaluation Comparison Value
	$^{Tot}Sed_{Comb}$[3]	TCEQ Ecological Benchmark for Sediment[4]	EPA EcoTox Threshold[5]			
Acetophenone	1.53E+04	---	---	1.53E+04	---	1.53E+04
Aniline	1.07E+03	---	---	1.07E+03	---	1.07E+03
Anthracene	3.71E+04	8.53E-02	8.53E-02	8.53E-02	---	8.53E-02
Atrazine (Aatrex)	6.40E+01	---	---	6.40E+01	---	6.40E+01
Benzaldehyde	7.35E+04	---	---	7.35E+04	---	7.35E+04
Benzidine	6.18E-02	---	---	6.18E-02	---	6.18E-02
Benzo(a)anthracene	1.59E+01	2.61E-01	2.61E-01	2.61E-01	---	2.61E-01
Benzo(a)pyrene	1.59E+00	4.30E-01	4.30E-01	4.30E-01	---	4.30E-01
Benzo(b)fluoranthene	1.59E+01	---	---	1.59E+01	---	1.59E+01
Benzo(g,h,i)perylene	3.71E+03	---	---	3.71E+03	---	3.71E+03
Benzo(k)fluoranthene	1.59E+02	---	---	1.59E+02	---	1.59E+02
Benzoic acid	6.12E+05	---	---	6.12E+05	---	6.12E+05
Benzyl alcohol	4.59E+04	---	---	4.59E+04	---	4.59E+04
Biphenyl	7.65E+03	---	1.10E+00	1.10E+00	---	1.10E+00
Bis(2-Chloroethoxy)methane	1.29E+01	---	---	1.29E+01	---	1.29E+01
Bis(2-Chloroethyl)ether	4.95E+01	---	---	4.95E+01	---	4.95E+01
Bis(2-Chloroisopropyl)ether	2.03E+02	---	---	2.03E+02	---	2.03E+02
Bis(2-Ethylhexyl)phthalate	2.44E+02	1.82E-01	1.82E-01	1.82E-01	---	1.82E-01
Butyl benzyl phthalate	3.06E+04	---	1.10E+01	1.10E+01	---	1.10E+01
Caprolactam	7.65E+04	---	---	7.65E+04	---	7.65E+04
Carbazole	7.10E+02	---	---	7.10E+02	---	7.10E+02
Chrysene	1.59E+03	3.84E-01	3.84E-01	3.84E-01	---	3.84E-01
Dibenz(a,h)anthracene	1.59E+00	6.34E-02	6.34E-02	6.34E-02	---	6.34E-02
Dibenzofuran	6.12E+02	---	2.00E+00	2.00E+00	---	2.00E+00
Diethyl phthalate	1.22E+05	---	6.30E-01	6.30E-01	---	6.30E-01
Dimethyl phthalate	1.22E+05	---	---	1.22E+05	---	1.22E+05
Di-n-butyl phthalate	1.53E+04	---	1.10E+01	1.10E+01	---	1.10E+01
Di-n-octyl phthalate	3.06E+03	---	---	3.06E+03	---	3.06E+03
Fluoranthene	4.95E+03	6.00E-01	6.00E-01	6.00E-01	---	6.00E-01
Fluorene	4.95E+03	1.90E-02	1.90E-02	1.90E-02	---	1.90E-02
Hexachlorobenzene	8.88E+00	---	---	8.88E+00	---	8.88E+00

TABLE 1 - EXTENT EVALUATION COMPARISON VALUES[1]

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 21 of RI/FS Workplan[2]			PSV (mg/kg)	Potential Site-Specific Background Values[6]	Extent Evaluation Comparison Value
	$^{Tot}Sed_{Comb}$ [3]	TCEQ Ecological Benchmark for Sediment [4]	EPA EcoTox Threshold [5]			
Hexachlorocyclopentadiene	9.19E+02	---	---	9.19E+02	---	9.19E+02
Hexachloroethane	1.53E+02	---	1.00E+00	1.00E+00	---	1.00E+00
Indeno(1,2,3-cd)pyrene	1.59E+01	---	---	1.59E+01	---	1.59E+01
Isophorone	1.50E+04	---	---	1.50E+04	---	1.50E+04
Nitrobenzene	7.65E+01	---	---	7.65E+01	---	7.65E+01
n-Nitrosodimethylamine	1.07E+00	---	---	1.07E+00	---	1.07E+00
n-Nitrosodi-n-propylamine	6.31E-01	---	---	6.31E-01	---	6.31E-01
n-Nitrosodiphenylamine	9.01E+02	---	---	9.01E+02	---	9.01E+02
o-Cresol	7.65E+03	---	---	7.65E+03	---	7.65E+03
Pentachlorophenol	5.61E+01	---	---	5.61E+01	---	5.61E+01
Phenanthrene	3.71E+03	2.40E-01	2.40E-01	2.40E-01	---	2.40E-01
Phenol	4.59E+04	---	---	4.59E+04	---	4.59E+04
Pyrene	3.71E+03	6.65E-01	6.65E-01	6.65E-01	---	6.65E-01
Pyridine	7.35E+02	---	---	7.35E+02	---	7.35E+02
Chloride	---	---	---	NV	NV	NV
Sulfate	---	---	---	NV	NV	NV
Total Moisture	---	---	---	NV	NV	NV
Total Organic Carbon	---	---	---	NV	NV	NV

Notes

1. All values in mg/kg.
2. Values from Table 21 of RI/FS Workplan unless indicated otherwise (updated to reflect changes since 2005)
3. $^{Tot}Sed_{Comb}$ PCL = TCEQ Protective Concentration Level for total sediment combined pathway (includes inhalation; ingestion; dermal pathways).
4. From Table 3-3 of TCEQ "Guidance for Conducting Ecological Risk Assessments at Remediation Sites in Texas". January 2006 Update.
5. From Table 2 of EPA "Ecotox Thresholds" ECO Update January 1996.
6. 95% UTL calculated from site-specific background samples.
7. NV = No Preliminary Screening Value.

TABLE 2 - PHASE 3 WETLAND SURFACE SEDIMENT SAMPLE DATA

Sample Location(s)	Sample Depth (ft)	Analytical Parameter	Concentration (mg/kg)	Extent Evaluation Comparison Value (mg/kg)
3WSED1	0-0.5	4,4'-DDT	<0.000598	0.00119
		Zinc	71.5 J	150
3WSED2	0-0.5	4,4'-DDT	<0.000634	0.00119
		Zinc	84.3 J	150
3WSED3	0-0.5	4,4'-DDT	<0.00064	0.00119
3WSED4	0-0.5	4,4'-DDT	<0.00103	0.00119
3WSED5	0-0.5	4,4'-DDT	<0.000813	0.00119
		Nickel	12.3	20.9
3WSED6	0-0.5	4,4'-DDT	<0.000794	0.00119
		Nickel	13.8	20.9
3WSED7	0-0.5	4,4'-DDT	<0.000864	0.00119
3WSED8	0-0.5	4,4'-DDT	<0.000588	0.00119
		Dieldrin	<0.000512	0.000715
		Zinc	86.9 J	150
3WSED9	0-0.5	Dieldrin	<0.000625	0.000715
		Zinc	**319 J**	150

Notes:
(1) Bolded values exceed preliminary screening value.
(2) Samples collected December 19, 2007.

TABLE 3 - PROPOSED WETLAND SEDIMENT SAMPLE ANALYSES

Sample Location(s)	Sample Depth (ft)	Analytical Parameter
4WSED1	0-0.5	Zinc
4WSED2, 4WSED3	0-0.5	VOCs[1] SVOCs[2] Pesticides[3] Metals[4] PCBs[5] Grain-size Total organic carbon

Notes:
(1) All VOCs listed in Table B-4 of Field Sampling Plan
(2) All SVOCs listed in Table B-4 of Field Sampling Plan
(3) All pesticides listed in Table B-4 of Field Sampling Plan
(4) All metals listed in Table B-4 of Field Sampling Plan except chromium (VI)
(5) All PCBs listed in Table B-4 of Field Sampling Plan